### The Langley Hill Radar: Was it Worth It?

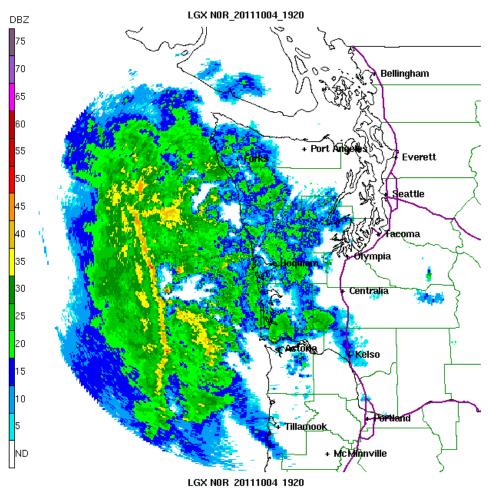


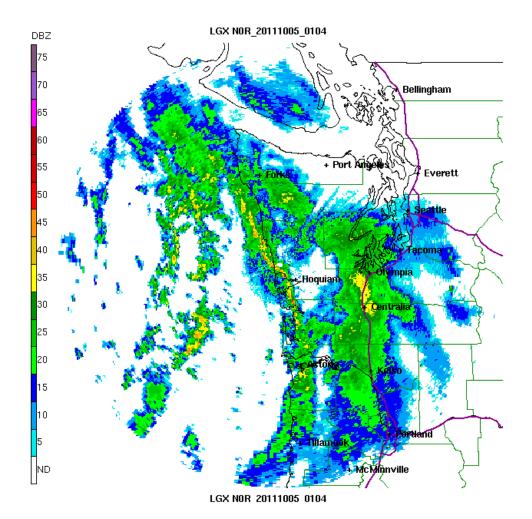
# s Rain Wet?

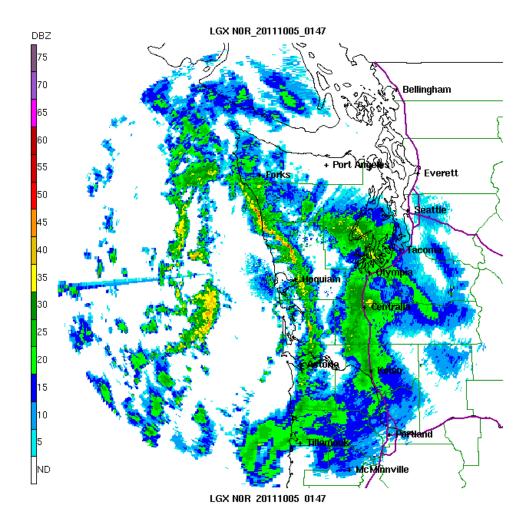
## The Langley Radar has clearly equaled if not exceeded expectations

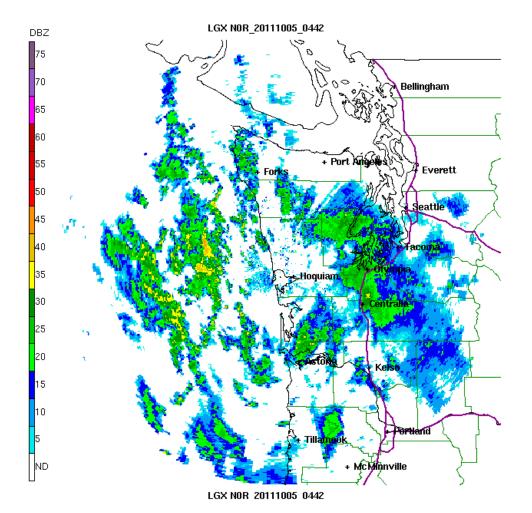
- Ocean ground clutter: a minor issue
- Has shown us the structure of oceanic weather systems approaching our coast.
- Has demonstrated coastal and windward mountain effects
- Has clearly led to increased forecast skill in the interior.

## Cold Front/Narrow Cold Frontal Rainband Approaching





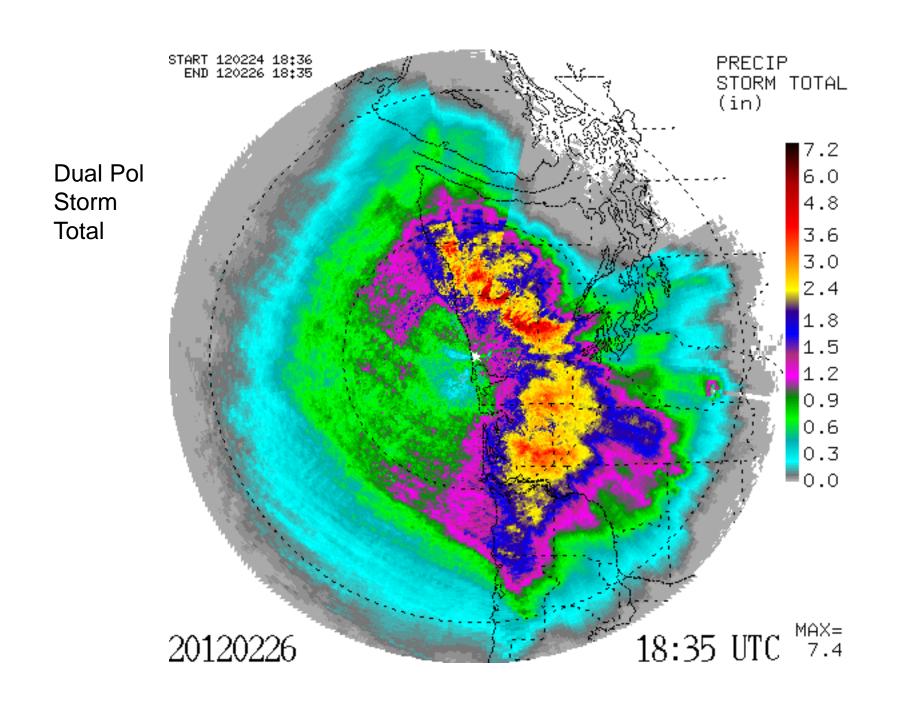




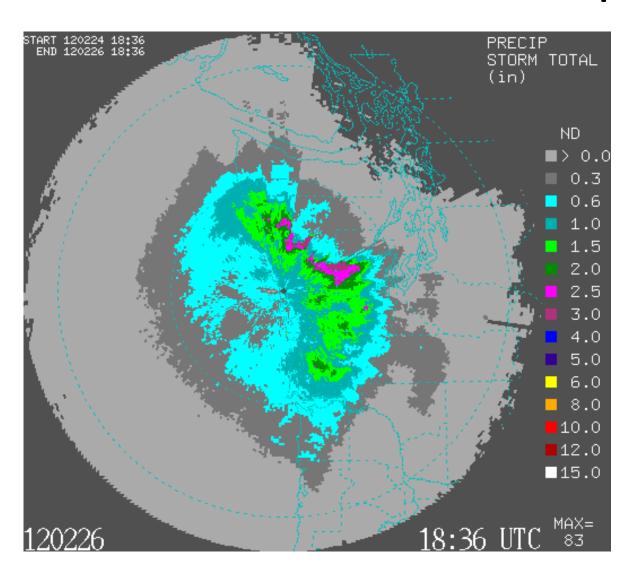
## NWS Personnel Discuss the Use of the Langley Hill Radar Frequently

/20111020.SEW.fx66:WEAK FRONTAL BOUNDARY. KLGX RADAR SHOWING VERY LIGHT ECHOES /20111227.SEW.fx66:HOWEVER KATX AND KLGX RADARS SHOW ANOTHER BATCH OF PRECIPITATION /20120101.PQR.fx66:AND THE THREAT OF PRECIPITATION. KLGX DUAL-POL RADAR SHOWS A LINE OF /20120103.SEW.fx66:AS FOR THE PRECIP...KLGX AND KATX SHOW RAIN MAINLY AFFECTING THE /20120103.SEW.fx66:AS FOR THE PRECIP...KLGX AND KATX SHOW RAIN MAINLY AFFECTING THE /20120106.PQR.fx66:LAYER AROUND 1000 FT PER KLGX MELTING LAYER AND CORRELATION /20120106.POR.fx66:LAYER AROUND 1000 FT PER KLGX MELTING LAYER AND CORRELATION /20120115.POR.fx66:ENHANCEMENT IS ALREADY SHOWING UP ON KRTX/KLGX RADARS. /20120124.PQR.fx66:REMAIN AT ABOUT 3000-3500 FT BASED ON KRTX/KLGX DUAL-POL INDICATIONS /20120124.PQR.fx66:REMAIN AT ABOUT 3000-3500 FT BASED ON KRTX/KLGX DUAL-POL INDICATIONS /20120124.POR.fx66:KRTX/KLGX DUAL-POL INDICATIONS AND SFC OBS AROUND THE AREA. /20120124.PQR.fx66:KRTX/KLGX DUAL-POL INDICATIONS AND SFC OBS AROUND THE AREA. /20120124.POR.fx66:KRTX/KLGX DUAL-POL INDICATIONS AND SFC OBS AROUND THE AREA. /20120131.POR.fx66:KLGX RADAR. SO WILL KEEP SOME DRIZZLE/LIGHT RAIN GOING THERE TODAY. /20120209.POR.fx66:.SHORT TERM...KLGX AND KRTX DUAL-POL DOPPLER RADARS SHOW AN AREA OF /20120209.PQR.fx66:.SHORT TERM...KLGX AND KRTX DUAL-POL DOPPLER RADARS SHOW AN AREA OF /20120212.PQR.fx66:AND MID LEVEL CLOUDS STREAMING IN AHEAD OF THE SYSTEM. KLGX COASTAL /20120212.PQR.fx66:.SHORT TERM...RADAR IMAGERY FROM KLGX COASTAL RADAR SHOWS WEAK /20120214.PQR.fx66:SYSTEM. THE KLGX RADAR IS DETECTING A MORE ORGANIZED BAND OF RAIN /20120216.PQR.fx66:MORNING. KLGX RADAR SHOWING RAIN AROUND 30 TO 60 MILES OFFSHORE AT 2 /20120223.SEW.fx66:THE LANGLEY HILL RADAR /KLGX/ SHOWED THE LEADING EDGE OF THE RAIN /20120224.SEW.fx66:THE LANGLEY HILL RADAR /KLGX/ SHOWED THE LEADING EDGE OF THE RAIN

## Can for the first time see precipitation totals on the windward side of the Olympics and Coastal Mountains



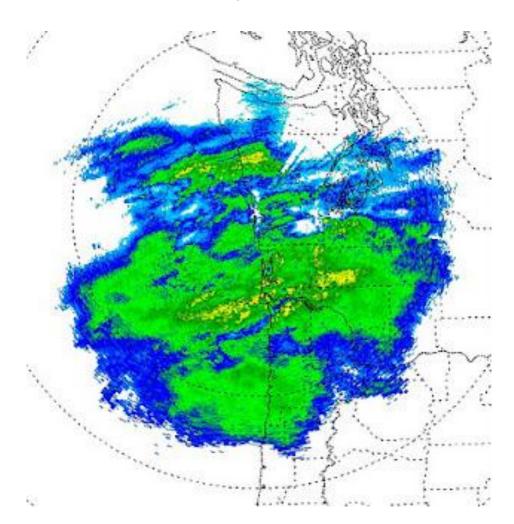
#### Conventional Z-R relationship



# The Radar Has Been Very Useful Telling Us When the Models Are Going Wrong....like the ice storm event in January



## Model's Did Not Bring the Precip North of Olympia—by 3-4 AM the Coastal Radar Indicated A Very Different Picture



#### And a lot more...